5.0 ENVIRONMENTAL IMPACT ANALYSIS

This is a joint Environmental Assessment/Initial Study (EA/IS) that integrates environmental review and compliance with the rules and guidelines of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). As presented in this section, the environmental analysis and discussion pursuant to NEPA/CEQA follows the organization of the CEQA Checklist in Section 4. An evaluation of the potential environmental impacts of the Heart-of-the-Park Shuttle Demonstration Project was developed based on field observations, consultation with agencies having jurisdiction within the project area, research, and the preparation of technical studies. The impact responses provided relate to the Preferred Alternative and not to the No Action Alternative. The information for the Affected Environment section for most topics was excerpted from the SMMNRA Draft GMP/EIS (NPS, December 2000). The technical studies that have been prepared are incorporated by reference into this EA/IS and are available for review at the following location:

National Park Service
Santa Monica Mountains National Recreation Area
401 West Hillcrest Drive
Thousand Oaks, CA 91360

METHODOLOGY/SIGNIFICANCE CRITERIA

NEPA

NEPA requires that environmental documents disclose the environmental impacts of a proposed federal action, provide reasonable alternatives to that action, and describe any adverse environmental effects that cannot be avoided should the Preferred Alternative be implemented. Under 40 CFR 1508.27, the NEPA requires consideration of context, intensity, duration, and timing when determining the significance of an environmental effect.

Context *refers to the setting within which an impact is analyzed such as the affected region, society as a whole, or the locale. In this EA/IS, the significance of an environmental effect is evaluated both within the immediate locale or project area context and region-wide or park-wide context.*

Intensity refers to the severity of the impact. The intensity of an impact may be:

Negligible:	When the impact is localized and not measurable.
Minimal:	When the impact is localized and slight but detectable.
Moderate:	When the impact is readily apparent and appreciable.
Major:	When the impact is severely adverse and highly noticeable.

When considering intensity, environmental impacts (whether beneficial or adverse) must consider the degree to which a project alternative affects public health and safety, affects the quality of the human environment, creates a level of controversy, and involves unknown risks, or the degree to which an action will establish a precedent for future actions.

Duration is a measure of the time period over which the effects of an environmental impact persist.

Short term:	When impacts are transitory, occur only during construction, or last less than one year.
Long term:	When impacts last longer than one year or longer

Cumulative Impacts. *In addition to project impacts, the environmental analysis must consider cumulative impacts. The Council on Environmental Quality's (CEQ's) regulations (40 CFR 1500–1508) implementing NEPA define cumulative effects as follows (CEQ, 1997):*

> *"The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions."*

Impairment of Park Resources or Values

The requirements of the National Park Service Organic Act and related laws guide the NPS in making management decisions that either avoid or minimize adverse impacts on park resources and values to ensure that those resources/values are passed to future generations "unimpaired". Director's Order-12, *Conservation, Planning, Environmental Impact Analysis and Decision Making* requires an analysis of potential effects to determine whether proposed actions and impacts would impair park resources and values.

Impairment is an impact that would harm the integrity of the park resources or values. An impact to any park resource or value may constitute impairment to the extent that it affects a resource or value whose conservation is:

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- Key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- Identified as a goal in the Recreation Area's General Management Plan or other NPS planning documents.

A determination of impairment is made for each impact topic within each "Conclusion" section of this EA/IS.

CEQA
CEQA provides public agencies with general authority to adapt criteria for determining whether a given impact is "significant". Such criteria are described as "threshold of significance". A threshold of significance is defined as "an identifiable quantitative, qualitative, or performance level of a particular environmental effect, non- compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect will normally be determined to be less than significant" (CEQA Guidelines, Section 15064.7).

***Cumulative Impacts*:** As stated in Section 15355 of the CEQA Guidelines (OPR, June 2001):

> *"Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.*
>
> *(a) The individual effects may be changes resulting from a single project or a number of separate projects.*
>
> *(b) The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.*

Environmental Impact Analysis Organization: For each environmental issue area, the methodology and significance criteria for NEPA and CEQA are provided and used in evaluating potential environmental impacts and assessing their significance. The following organization is used throughout Section 5:

- Issue Area
- Checklist
- Affected Environment
- Methodology/Significance Criteria
- Environmental Consequences (No Action Alternative and Preferred Alternative)
- Cumulative Impacts (No Action Alternative and Preferred Alternative)
- Conclusion (No Action Alternative and Preferred Alternative)

5.1 AESTHETICS

Would the project:

a) Have a substantial adverse effect on a scenic vista? ***Less Than Significant Impact***

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? ***Less Than Significant Impact***

c) Substantially degrade the existing visual character or quality of the site and its surroundings? ***Less Than Significant Impact***

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? ***No Impact***

AFFECTED ENVIRONMENT

Much of the study area consists of mountainous terrain, open space views, and scenic overlooks, with some isolated rural communities and suburban development. Within Malibu and along the Pacific Coast Highway (PCH), open space views are replaced with dense commercial and residential uses. The entire route can be considered scenic in that it displays to visitors along the roadways many open views of rocky outcrops, natural communities, the Pacific Ocean, and beach-oriented communities. Although most of the roadways that serve as the route for this project are not designated as state scenic routes, PCH is designated as an eligible State Scenic Highway (Streets and Highways Codes, Section 263.2, 2002). The City of Malibu and its local coastal commission have designated PCH as a locally scenic highway as well (Michitsch, 2002).

The *Draft GMP/EIS* identified Mullholland Drive, the Pacific Coast Highway, and Malibu Canyon Road as scenic corridors.

METHODOLOGY/SIGNIFICANCE CRITERIA

NEPA: Potential adverse effects for NEPA are considered based on the degree by which the action would have impacts on visual resources or result in hindering visitors' experiences, and are described by the following intensity levels:

- Negligible – Effects are not detectable and would have no discernible effect on visual resources or on the visitor experience.
- Minimal – Impacts are slightly detectible, but would not be expected to have an overall effect on visual resources or on the visitor experience.
- Moderate – Impacts are clearly detectable and could have an appreciable effect on visual resources or on the visitor experience.
- Major – Impacts would have a substantial, highly noticeable influence on visual resources or on the visitor experience.

CEQA: A project would have a significant effect on the environment if it would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources within a state scenic highway;
- Substantially degrade the existing visual character or quality of the site; or
- Create new sources of substantial light or glare.

ENVIRONMENTAL CONSEQUENCES

No Action Alternative

The No Action Alternative would result in the same access to scenic vistas and highways, and would have no different effects on aesthetics or light and glare.

Preferred Alternative

a) Have a substantial adverse effect on a scenic vista: The proposed shuttle system would operate along roadways offering views of several scenic vistas, such as overlooking Malibu Creek State Park and views from Kanan Dume Road. Although not designated as scenic vistas, they are

locally important to visitors. Visual impacts from construction equipment and activities would be minimal and temporary. The proposed shuttle system would have several informal, non-improved stops at these vistas, accompanied by narration of their significance by park staff. This is considered a beneficial impact. The occasional appearance of the Shuttle bus is considered a less than significant and minimal impact to these scenic vistas.

b) Substantially damage scenic resources within a state scenic highway: The Preferred Alternative would not hinder the scenic qualities or functions of PCH as a State-eligible and locally-designated scenic route, and may even encourage shuttle riders to appreciate PCH for its scenic qualities. Impacts would be less than significant and minimal.

c) Substantially degrade the existing visual character or quality of the site and its surroundings: The National Park Service, as part of their project commitments, will ensure that all new facilities (signs, canopies, benches, kiosks, restrooms) will be visually compatible in design and color to existing park facilities at each planned shuttle stop (see Appendix A for typical designs of these facilities, including two illustrative site layout drawings). Thus, the Preferred alternative would have a less than significant and minimal negative aesthetic effect.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area: The proposed shuttle system would operate during daylight hours, with the possibility of evening service. No new lighting or glare would be introduced for the operation or construction at any of the proposed stop locations. Impacts would be negligible.

CUMULATIVE IMPACTS

No Action Alternative
The No Action Alternative would not contribute to cumulative effects on visual resources or receptors.

Preferred Alternative
The Preferred Alternative would not contribute to cumulative effects on visual resources or receptors.

CONCLUSION

No Action Alternative
The No Action Alternative would not negatively affect scenic resources or the visitor experience.

Preferred Alternative
The Preferred Alternative would minimally affect scenic resources or the visitors' experience.

5.2 AGRICULTURAL RESOURCES

Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
No Impact

b) Conflict with existing zoning for agricultural use or a Williamson Act Contract? ***No Impact***

c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural uses? ***No Impact***

AFFECTED ENVIRONMENT

The study area contains very few agricultural land uses, none of which are adjacent to the proposed shuttle route or stops. No farmland designations (including Prime, Unique, Statewide Importance) were identified in the study area (FMMP, 2000).

METHODOLOGY/SIGNIFICANCE CRITERIA

NEPA: Potential adverse effects for NEPA are considered based on the degree by which the action would have impacts on agricultural resources, and are described by the following intensity levels:

- Negligible – Effects are not detectable and would have no discernible effect on agricultural resources.
- Minimal – Impacts are slightly detectible, but would not be expected to have an overall effect on agricultural resources.
- Moderate – Impacts are clearly detectable and could have an appreciable effect on agricultural resources.
- Major – Impacts would have a substantial, highly noticeable influence on agricultural resources.

CEQA: A project would have a significant effect on the environment if it would:

- Convert Prime Farmland to non-agricultural use or impair the agricultural productivity of prime agricultural land.

ENVIRONMENTAL CONSEQUENCES

No Action Alternative

The No Action Alternative would result in no anticipated conversion of existing agricultural resources to other land uses.

Preferred Alternative

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use: The proposed shuttle and stops would not result in converting any farmlands to non-agricultural uses, as there are no such uses within the shuttle route area.

b) Conflict with existing zoning for agricultural use or a Williamson Act Contract: The Preferred Alternative would not conflict with agricultural zoning or break a Williamson Act Contract, as there is no agricultural zoning or contracts within the shuttle route area.

c) Involve other changes in the existing environment which could result in conversion of Farmland to non-agricultural uses: The proposed shuttle and stops would not result in any

changes that would ultimately convert Farmlands to non-agricultural uses, as there are no identified Farmlands in the project vicinity.

CUMULATIVE IMPACTS

No Action Alternative
The No Action Alternative would not contribute to cumulative effects on agricultural resources.

Preferred Alternative
The Preferred Alternative would not contribute to cumulative effects on agricultural resources.

CONCLUSION

No Action Alternative
The No Action Alternative would not negatively affect agricultural resources.

Preferred Alternative
The Preferred Alternative would not negatively affect agricultural resources.

5.3 AIR QUALITY

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan or regulation? ***No Impact***

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? ***No Impact***

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? ***No Impact***

d) Expose sensitive receptors to substantial pollutant concentrations (e.g., children, the elderly, individuals with compromised respiratory or immune systems)? ***No Impact***

e) Create objectionable odors affecting a substantial number of people? ***No Impact***

AFFECTED ENVIRONMENT

Congress recognized the significance of the Santa Monica Mountains, situated between the Los Angeles Basin, the San Fernando Valley, and the Oxnard Plain, in the recreation area's enabling legislation. Public law 95-625 specified, "…the Secretary shall manage the Recreation Area in a manner which will preserve and enhance… its public value as an air shed for the southern California metropolitan area."

Overall, the Santa Monica Mountains and coastal areas exhibit better air quality than the surrounding urban landscape, especially urban Los Angeles which is among the worst for air

quality in the nation. However, localized air quality in the mountains is likely to degrade as long as expanding development results in increased traffic volumes in and around the mountains.

The 2000 *Draft GMP/EIS* lists Access and Transportation mission goals for subsequent development. The following goal applies to air quality:

- Improve the air quality by encouraging the use of alternative forms of transportation and the use of alternative fuels.

METHODOLOGY/SIGNIFICANCE CRITERIA

NEPA: Potential adverse effects for NEPA are considered based on the degree by which the action would increase ambient air quality or expose sensitive receptors to air pollution, and are described by the following intensity levels:

- Negligible – Effects are not detectable and would have no discernible effect on air quality or sensitive receptors.
- Minimal – Impacts are slightly detectable, but would not be expected to have an overall effect on air quality or sensitive receptors.
- Moderate –Impacts are clearly detectable and could have an appreciable effect on air quality or sensitive receptors.
- Major – Impacts would have a substantial, highly noticeable influence on air quality or sensitive receptors.

CEQA: A project would have a significant effect on the environment if it would:

- Conflict with an air quality plan or regulation;
- Violate any air quality standards or contribute substantially to an existing projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project area is in non-attainment;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

ENVIRONMENTAL CONSEQUENCES

No Action Alternative

With the No Action Alternative, existing traffic congestion conditions along the project area roadways would remain unchanged and, may continue to deteriorate with time. This alternative would conflict with the NPS's goal to improve air quality through the use of alternative transportation modes and fuels. Existing and increased traffic congestion would continue to add to the adverse air quality in the local area and regional air basins for Southern California. Impacts to air quality would be minimal to moderate.

Preferred Alternative

a) Conflict with or obstruct implementation of the applicable air quality plan or regulation: As part of the Preferred Alternative, shuttle buses would either run on low- to zero-emission fuels such as compressed natural gas (CNG) or utilize the best available unleaded fuel buses to prevent adding substantially to existing air pollutant levels. Furthermore, the use of shuttles will likely reduce the amount of vehicles driving in and around the project area on weekends, resulting in

slightly reduced air pollutant emissions. Thus, the project would not conflict with any applicable air quality plans or regulations.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation: Because the Preferred Alternative would utilize clean fuels or low-emission shuttles for shuttle transportation, and because it would result in reducing some vehicular traffic during weekends, the project would not contribute substantially to air quality violations.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard: Because the Preferred Alternative would utilize clean fuels or low-emission shuttles for shuttle transportation, and because it would result in reducing some vehicular traffic during weekends, the project would not result in a cumulatively considerable net increase of any non-attainment pollutants.

d) Expose sensitive receptors to substantial pollutant concentrations: The proposed shuttle and stops would not expose people to increased air pollutants, as the shuttle bus emissions are expected to be extremely low. Construction activities related to shuttle stop improvements may cause temporary exposure of park visitors to degraded air quality. These impacts would be temporary and therefore minimal and less than significant.

e) Create objectionable odors affecting a substantial number of people: Operation of the proposed shuttle and stops would not create objectionable odors. As part of the project commitments, the proposed restroom at the **Backbone Trail** stop would be periodically emptied for waste and would be well maintained to avoid causing objectionable odors. Construction of the preferred alternative may result in temporary objectionable odors from diesel construction equipment. Such impacts, however, would be temporary at each stop, and therefore negligible.

a) Violate any air quality standard or contribute to an existing or projected air quality violation: As part of the Preferred Alternative, shuttle buses would run on low-emission fuels such as CNG or other equivalent fuels to prevent adding to existing air pollutant levels. The use of shuttles will likely reduce the amount of vehicles driving in and around the project area on weekends, resulting in slightly reduced air pollutant emissions.

CUMULATIVE IMPACTS

No Action Alternative
The No Action Alternative would result in cumulative impacts to air quality resulting from future and increased traffic demands.

Preferred Alternative
The Preferred Alternative would not contribute to cumulative impacts air quality or sensitive receptors.

CONCLUSION

No Action Alternative
The No Action Alternative would cause minimal to moderate impacts to air quality and would expose sensitive receptors to air pollutants.

Preferred Alternative
The Preferred Alternative would not impair air quality or expose sensitive receptors to air pollutants. It may improve air quality by implementing the use of alternative forms of transportation and/or alternative fuels.

5.4 BIOLOGICAL RESOURCES

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a sensitive, candidate, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? ***Less Than Significant with Mitigation***

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?
Less Than Significant Impact

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
No Impact

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? ***No Impact***

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? ***No Impact***

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? ***No Impact***

AFFECTED ENVIRONMENT

The study area is mainly comprised of open space, parkland, and existing development. The various planned shuttle stops provide points of entry for visitors into natural habitats such as riparian woodlands, coastal strand, and northern mixed chaparral. At the **Peter Strauss Ranch** shuttle stop, the natural habitat is riparian woodland. This habitat provides great species diversity with multi-layered vegetation and normally occurs near water drainages. Riparian woodlands are among the most endangered plant communities. Coastal strand communities consist of drought conditions and infertile substrate, with plants that have adapted to shifting sands by sending rhizomes to reproduce and spread. Chaparral communities consist of drought- and fire-adapted shrubs that are impenetrable at heights of less than ten feet. Within these environments there is a potential for some federally- or state-listed plant species to occur, although no species were identified by database as being located on-site (CNDDB, 2002). The study area is not within any established wildlife or migration corridors.

The 2000 *Draft GMP/EIS* lists Resource Condition mission goals for subsequent development. The following goals apply to biological resources:

- Protect and enhance species, habitat diversity and natural processes within the SMMNRA.
- Protect and restore native plant species and plant communities, such as coastal sage scrub, coastal live oak woodland, and valley oak savannas.
- Enact programs to combat and remove the encroachment of exotic flora and fauna into natural ecosystems when possible.

METHODOLOGY/SIGNIFICANCE CRITERIA

NEPA: Potential adverse effects for NEPA are considered based on the degree by which the action would introduce or increase impacts to biological resources, and are described by the following intensity levels:

- Negligible – Impact is barely perceptible and measurable; remains localized and confined to a single, non-sensitive biological element under discussion, such as a single location, population, process, species, community, or other biological entity.
- Minimal – Impact is perceptible and measurable; remains localized and confined to a single or few elements of a non-sensitive biological element under discussion, such as a single location, population, process, species, community, or other entity that is recognized as relatively common, and that would recover from disturbances in a relatively short time period (years).
- Moderate – Impact is sufficient to cause a change in character-defining features of a biological element; generally involves a single or small group of elements in a biological community, process, species or other entity that is moderately to highly sensitive to human development, encroachment, or disturbance, and that would recover from disturbances in a moderate time period (decades).
- Major – Impact results in substantial and highly noticeable change in character-defining features; involves a large group of contributing elements, or involves an individually significant element with a significantly important ecological role in a biological community, process, species, or other entity that is highly sensitive to human development, encroachment, or disturbance, and that may not recover from the impact within the SMMNRA or region.

CEQA: A project would have a significant effect on the environment if it would:

- Substantially affect a rare or endangered species of animal or plant, or the habitat of the species;
- Substantially affect a federally protected wetlands;
- Interfere substantially with the movement of any resident or migratory fish or wildlife species; or
- Conflict with any local policies or ordinances protecting biological resources, or an adopted Habitat Conservation Plan or other approved protection plan.

Regulatory Compliance:

- *Federal Endangered Species Act* – This act requires federal agencies to consult with the U.S. Fish and Wildlife Service if the agencies determine that their actions would affect any threatened or endangered species. Any incidental take of a listed species would require a Section 7 consultation with the U.S. Fish and Wildlife Service and possibly the National Marine Fisheries Service for incidental take of upland habitats occupied by listed species.

- *California Endangered Species Act* – Similar to the federal act, this statute requires state and local agencies with discretionary decisions to make on projects to consult with the California Department of Fish and Game if California-listed threatened or endangered species might be affected.
- *Fish and Game Section 1603* – Under the California Fish and Game Code, Section 1603, administering agencies must obtain a Streambed Alteration Agreement with the California Department of Fish and Game before filing or altering a streambed.
- *Wetlands* – The wetland protection mechanisms used by NPS include Executive Order 11990, Protection of Wetlands; Director's Order Number 77-1, Wetland Protection, and its accompanying Procedural Manual Number 77-1; Clean Water Act Section 404; and the "no net loss" goal outlined by the White House Office on Environmental Policy in 1993. Executive Order 11990 requires that leadership be provided by involved agencies to minimize the destruction, loss, or degradation of wetlands. NPS Director's Order Number 77-1 and Procedural Manual Number 77-1 provide specific procedures for carrying out the Executive Order. Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act authorize the Army Corps of Engineers to grant permits for construction and disposal of dredged material in waters in the United States.

ENVIRONMENTAL CONSEQUENCES

No Action Alternative

Under the No Action Alternative no impacts would occur to sensitive species, communities, wetland habitats, or other critical habitats.

Preferred Alternative

a) Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a sensitive, candidate, or special status species: Construction and operation of the proposed shuttle system would result in less than significant and negligible impacts to federal or State special status species or their habitats at most sites, as improvements would be made in disturbed, non-vegetated areas. Construction would result in temporary noise, but would not be anticipated to harm sensitive species at each site, as existing adjacent traffic and user noise are already part of each site's nuisances. Construction impacts would be minimal and temporary.

At the **Rocky Oaks** stop, a kiosk and bench would be placed near an existing non-mature oak tree. This plant is not listed as endangered, threatened or rare by the USFWS, the CNDDB, or by the California Native Plant Society. This plant is locally protected, however, and its removal should be avoided. As part of the project commitments, the kiosk will be either modified to avoid disturbance to the oak tree (e.g., not providing a roof over kiosk) or will be relocated to a more disturbed part of the site. At the **Tapia Park** and **Zuma Beach** stops, no listed species were observed to occur where construction and grading would take place (Chambers Group, 2002a). At **Malibu Creek** and **Malibu Lagoon** State Parks, no vegetation or wildlife habitats would be impacted.

At the **Peter Strauss Ranch** stop, the existing pedestrian trail would be widened to allow wheelchair access (*Americans with Disabilities Act*-compliant) to and from the Harry Miller house. This would involve widening the existing trail from approximately three-to-four feet wide, to a six-foot wide, metal-edged trail with decomposed granite as the surface. Existing low-lying vegetation along both sides of the trail would be displaced. Although the sensitive plant species Lyon's pentachaeta, Malibu baccharis, and Plummer's mariposa lily have been known to

occur in the general area (Independent Environmental Consultants, 1990), it is unlikely that they would exist alongside the existing trail at Peter Strauss Ranch as the soil conditions are unfavorable for their growth (John Tiszler and Melanie Beck of SMMNRA, March 13 and 14, 2002). Nevertheless, if any sensitive plants were found prior to construction, mitigation would be required.

NPS's mission goals would be upheld, as species, habitat diversity, and natural communities would be protected after incorporation of mitigation. As part of NPS's project commitments, only native plant palettes will be used at all stops incorporating new landscaping.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations: Construction and operation of the proposed shuttle system would not result in impacts to sensitive natural communities. Although minimal vegetation would be taken at some locations such as the **Rocky Oaks** and **Peter Strauss Ranch** stops, no impacts are anticipated to occur to natural communities.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means: No wetlands are located at or near most shuttle stop locations. At **Zuma Beach**, however, wetlands are located at least 200 feet away from the proposed stop location. Impacts would be less than significant and minimal, however, as no work would be done inside the established wetland restoration boundaries. Furthermore, no new drainage patterns would be introduced to carry surface runoff into the wetland area. As part of the project commitments, native landscaping using NPS approved plant palettes will be used at Zuma Beach where the buffer areas would be established. This will prevent accidental introduction of non-native invasive weeds into the existing wetland habitat.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites: Construction and operation of the Preferred Alternative would not result in impacts to native species movement, migration, or dispersal.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance: The Preferred Alternative would not conflict with local biological resource protection policies, as no locally protected species will be removed.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan: The project area is not located within the boundaries of any Habitat Conservation Plans, so no impact would occur.

MITIGATION

Following final design plans for the **Peter Strauss Ranch** site, and prior to grading and construction, NPS biologists will conduct a survey along each side of the existing pedestrian trail to determine the absence/presence of any sensitive plant species. If any sensitive plants are found, NPS will avoid impacts to such plants by reconfiguring the trail as necessary. If impacts cannot be avoided, appropriate consultation with U.S. Fish and Wildlife and/or California Department of Fish and Game will be conducted in determining appropriate transplanting or re-establishment of sensitive species. Implementation of this mitigation is anticipated to reduce potential impacts to minimal and less than significant levels.

CUMULATIVE IMPACTS

No Action Alternative
The No Action Alternative would not contribute to cumulative effects on biological resources.

Preferred Alternative
The Preferred Alternative would not contribute to cumulative effects on biological resources.

CONCLUSION

No Action Alternative
The No Action Alternative would not negatively affect or impair biological resources.

Preferred Alternative
With implementation of mitigation measures, the Preferred Alternative would not negatively affect or impair biological resources.

5.5 CULTURAL RESOURCES

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource, as defined in Section 15064.5? ***Less Than Significant with Mitigation***

b) Cause a substantial adverse change in the significance of an archaeological resource, pursuant to Section 15064.5? ***Less Than Significant with Mitigation***

c) Disturb any human remains, including those interred outside of formal cemeteries? ***No Impact***

d) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature? **No Impact**

AFFECTED ENVIRONMENT

The study area has a rich history, both paleontological and archaeological. Fossils found in the area range from the Late Cretaceous Chatsworth formation to Pleistocene aged land mammals. Paleontological resources are considered rare near the surface layers within the SMMNRA. Archaeological resources have been found from the Chumash and Gabrielino/ Tongva native Californians from pre-expedition years, as well as from the Spanish missionaries between the 17th to 19th Centuries. Although there are several historic structures (such as the Adamson House on PCH), no historic structures are located at any of the stop sites in the study area. **Paramount Ranch** has been identified as a cultural landscape potentially eligible for listing in the National Register of Historic Places (NRHP), for the property's long-time association with Paramount Pictures Corporation and with the American motion picture industry. **Peter Strauss Ranch** and **Solstice Canyon** are potential historic districts eligible for listing in the NRHP. None of the study area's stop sites are places of ethnographic importance.

The *Draft GMP/EIS* lists Resource Condition mission goals for subsequent development. The following goals apply to cultural resources:

- Minimize development of open space, ethnographic, and cultural landscapes within the recreation area. Resource protection and management would take priority in decisions regarding proposed developments, and the SMMNRA would work with local municipalities to provide scientific, resource related information on which to base actions.
- Share results from consultations with Native American Indians and other ethnic groups with ties to the SMMNRA.

METHODOLOGY/SIGNIFICANCE CRITERIA

NEPA: Potential adverse effects for NEPA are considered based on the degree by which the action would have impacts on cultural resources and are described by the following intensity levels:

- Negligible – Impact is barely perceptible and not measurable; confined to small areas or a single contributing element of a paleontological or a larger National Register district of archaeological site(s) with low data potential.
- Minimal – Impact is perceptible and measurable; remains localized and confined to a single contributing element of a paleontological or a National Register district or archaeological site(s) with low to moderate data potential.
- Moderate – Impact is sufficient to cause a change in character-defining feature; generally involves a single or small group of contributing elements, or paleontological or archaeological site(s) with moderate to high data potential.
- Major – Impact results in a substantial and highly noticeable change in character-defining features; involves a large group of contributing elements and/or individually significant property, or paleontological or archaeological site(s) with high to exceptional data potential.

CEQA: A project would have a significant effect on the environment if it would:

- Cause a substantial adverse change in the significance of historical or archaeological resources;
- Disturb any human remains; or
- Directly or indirectly destroy a unique paleontological resource or site.

Regulatory Compliance:

- *Federal Antiquities Act of 1906 (P.P. 59-209; 34 Stat. 225, 16 U.S.C 432,433)* – This act forbids the disturbance of any object of antiquity on federal lands without a federal permit, and establishes sanctions for unauthorized appropriation of antiquities.
- *National Environmental Policy Act of 1969 (P.L. 91-100; Stat. 852, 42 U.S.C. 4321-4327)* – This act requires that important natural aspects of the national heritage be considered in assessing the environmental consequences of a proposed project on federal lands, or a project requiring federal entitlement. *Section 106 (36 CFR 800)* of NEPA provides that the Agency Official shall apply the Criteria of Effect (*Section 800.9(a)*) to historic properties that may be affected, giving consideration to the views, if any, of interested persons. *Section 4(f) (23 CFR 771)* interprets that a use of a NEPA-Section 4(f) resource (*defined as a public recreational, historic, or natural resource that would be substantially impacted and cannot be avoided or mitigated*) occurs (1) when land from a Section 4(f) site is acquired for a transportation project; (2) when there is an occupancy of land that is adverse in terms of the statute's preservation purpose; or (3) when the

proximity impacts of the transportation project on the Section 4(f) site, without acquisition of land, are so great that the purpose for which the Section 4(f) site exists are substantially impaired. The latter type of use is also known as a "constructive" use. Section 4(f) is also applicable to historic properties and archaeological resources only when the resource is included on, or eligible for, the National Register of Historic Places (NRHP). The criteria for eligibility for the NRHP are defined as:

> *. . . the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and*
>
> *A. that are associated with events that have made a significant contribution to the broad patterns of our history; or*
>
> *B. that are associated with the lives of persons significant in our past; or*
>
> *C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or*
>
> *D. that have yielded, or may be likely to yield, information important in prehistory or history. . . .* (36 CFR 60.4)

- *Archaeological and Historic Preservation Act of May 24, 1974 (88 Stat. 174; Sections 3[a] and 4[a])* – This act provides for the preservation of historical and archaeological data, which might be lost as a result of federal projects or of federally licensed projects or activities. The noted sections require survey for, and protection or recovery of, objects or data of scientific significance that are threatened by construction projects.
- *Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. 3001 et seq)* – This act provides for the protection of Native American graves, as it allows claiming and repatriation of cultural resources found in graves to rightful descendents or those culturally affiliated with such resources.

ENVIRONMENTAL CONSEQUENCES

No Action Alternative

The No Action Alternative would have no impacts on paleontological, archaeological, historical, or unique ethnic resources.

Section 106 Summary: After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR 800.5, *Assessment of Adverse Effects*), the National Park Service concludes that implementation of the No Action Alternative would have *no effect* on identified archaeological resources.

Preferred Alternative

a) Cause a substantial adverse change in the significance of a historical resource: Most stop sites are not identified as potentially eligible for the NRHP (Chambers Group, 2002b; Michael Sampson, CSP, 2002; Phil Holmes, SMMNRA, 2002). At these sites, no historical resources have been identified in locations where the project would require improvements, so no substantial adverse changes in the significance of historical resources would occur.

The **Peter Strauss Ranch** stop is potentially eligible as a historic district under the NRHP, and its entrance arch (which only consists of the arch's pillars, while the arch itself has been removed) is on the NPS's List of Classified Structures. Construction of the improvements at the Peter Strauss Ranch parking lot would not impair the site's integrity or character as a potential historic district, as there would be minimal and temporary noise and visual impacts. No mitigation is required for construction impacts. The improvements (canopy, bench, signs, landscaped island, and improved trail) proposed at the Peter Strauss Ranch parking lot would not likely impair the site's integrity or character as a potential historic district, as the design elements would be made to be visually and functionally compatible with the site and its historic character (e.g., railroad ties would be used to contain landscaping, etc.) (see Appendix A for typical designs of improvements). Nevertheless, mitigation is required to ensure that any potential impacts to the site's eligibility as a historic district remains and its historic character and integrity are not significantly compromised. The entrance arch would not be impacted visually or functionally by the proposed construction or improvements. As all potentially historic resources would not be significantly impacted after mitigation, no 4(f) discussion is required.

The **Paramount Ranch** stop is a potentially eligible cultural landscape historic district under the NRHP, and the Mill Carpenter Shop is on the NPS's List of Classified Structures. Construction of the improvements at the Paramount Ranch parking lot would not impair the site's integrity or character as a potential historic district, as there would be minimal and temporary noise and visual impacts. No mitigation is required for construction impacts. The improvements (canopy, seating, signs, park and ride spaces, and landscaped island) proposed at the Paramount Ranch parking lot would not likely impair the site's integrity or character as a potential historic district, as the design elements would be made to be visually and functionally compatible with the site and its historic character (e.g., landscaping would be designed to be compatible with the "Western Town" theme, parking spaces would not interfere with views of the "Western Town," etc.) (see Appendix A for typical designs of improvements). The Mill Carpenter Shop would also not likely be impaired visually or functionally as a local historic resource, as the design elements would be made to be visually and functionally compatible with the building and its historic character (e.g., the canopy would be of the same materials, color, and height dimensions as the building, etc.). Nevertheless, mitigation is required to ensure that any potential impacts to the site's eligibility as a historic district remains and its historic character and integrity are not significantly compromised. As all potentially historic resources would not be significantly impacted after mitigation, no 4(f) discussion is required.

b) Disturb archaeological resources: Most improvements at shuttle stops would not result in grading or excavations and would take place on disturbed soils. The scope of work is generally limited to a small number of post footings for canopies, kiosk wayside exhibits, and signs.

At the **Malibu Creek** stop, minor excavation of an existing soil berm would be performed to level and prepare the site for a dedicated shuttle lane. The berm was artificially formed from excavated soil on-site, within the past ten years, to serve as a physical barrier for vehicles. The potential for encountering archaeological resources while excavating the berm is unlikely (Michael Sampson, March 14, 2002). Nevertheless, mitigation will be required in case resources are found during excavation.

At the **Tapia Park** stop, minor excavation for a concrete pad (15 feet long by 15 feet wide by 3 inches deep) will be performed to establish a level shuttle stop waiting area. Based on records searches, archaeological resources have been found from previous surveys in the nearby vicinity (Chambers, 2002b). Chambers Group performed a field survey on March 11, 2002. The survey

did not reveal any evident archaeological resources at the surface. Nevertheless, mitigation will be required in case resources are found during excavation.

At the **Zuma Beach** stop, minor excavation and soil fill would be required to obtain a level surface for the proposed extension of the existing pedestrian pathway. Based on records searches, archaeological resources have been found from previous surveys in the nearby vicinity (Chambers, 2002b). Chambers Group performed a field survey on March 11, 2002. The survey did not reveal any evident archaeological resources at the surface. Nevertheless, mitigation will be required in case resources are found during excavation.

At the **Backbone Trailhead** stop, moderate excavation for one underground vault public toilet would be performed. No archeological resources have previously been found in the immediate area, so it is highly unlikely that resources would be found for this excavation (Phil Holmes, SMMNRA, March 13, 2002), since most of the existing level area for parking facilities was created by excess cut soil from the construction of Kanan Dume Road. Nevertheless, because of the depth required for the vault toilet waste storage, mitigation will be required in case resources are found during excavation.

At the **Peter Strauss Ranch** stop, minor excavation and fill will be performed to change an existing grade of the pedestrian trail from eight to five-percent, for compatibility with ADA standards. This location is within a non-designated floodplain, with a history of flash floods. Such flooding, in conjunction with the recent disturbance of the site, makes it highly unlikely that any archaeological resources would be found during excavation. Furthermore, no previous archaeological sites have been identified within one-mile of the Peter Strauss Ranch stop (Tartaglia, 1990). Nevertheless, because of the excavation required for the trail improvement, mitigation will be required in case resources are found during excavation.

c) Disturb any human remains, including those interred outside of formal cemeteries: No Native American or other gravesites were identified within the project area. Where soil would be excavated as discussed above for archaeological resources, mitigation will be provided to prevent potentially significant and moderate impacts to less than significant and minimal (see mitigation below).

d) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature: It is highly unlikely that any of the planned improvements would result in yielding paleontological resources, as all excavations will be of immediate topsoil or disturbed soils.

Section 106 Summary: After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR 800.5, *Assessment of Adverse Effects*), the National Park Service concludes that implementation of the Preferred Alternative would have *no adverse effect* on identified archaeological resources.

MITIGATION

For the **Peter Strauss Ranch** and **Paramount Ranch** stops, final design of all shuttle stop elements (e.g., kiosks, canopies, landscaping, etc.) would be made to be visually compatible and complimentary to the historic character of these sites, to the satisfaction of an NPS architectural historian. If no compatible design can be established for any of these shuttle stop elements, then such elements will be replaced or removed as necessary to preserve the sites' historic character. This mitigation is anticipated to reduce potentially significant and moderate impacts to less than significant and minimal levels.

For the **Malibu Creek**, **Tapia Park**, **Zuma Beach**, **Backbone Trailhead**, and **Peter Strauss Ranch** stops, a certified archaeologist will be present during all excavation activities. Should presently unidentified archaeological resources be discovered during construction, work in that location would stop until the resources are properly recorded by an NPS archaeologist and evaluated under the eligibility criteria of the National Register of Historic Places. If the resources were determined eligible, appropriate measures would be implemented either to avoid further resource impacts or to mitigate their loss or disturbance (e.g., by data recovery excavations or other means) in consultation with the California SHPO and Chumash tribal representatives. In compliance with the Native American Graves Protection and Repatriation Act of 1990, the National Park Service would also notify and consult concerned Chumash representatives for the proper treatment of human remains and funerary and sacred objects, should these be discovered during the course of the project. This mitigation is anticipated to reduce potentially significant and moderate impacts to less than significant and minimal levels.

CUMULATIVE IMPACTS

No Action Alternative
The No Action Alternative would not contribute to cumulative effects on cultural resources.

Preferred Alternative
The Preferred Alternative would not contribute to cumulative effects on cultural resources.

CONCLUSION

No Action Alternative
The No Action Alternative would not negatively affect or impair cultural resources.

Preferred Alternative
With implementation of mitigation measures, the Preferred Alternative would not negatively affect or impair cultural resources.

5.6 GEOLOGY AND SOILS

Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)? **Less Than Significant Impact**

ii) Strong seismic ground shaking? **Less Than Significant Impact**

iii) Seismic-related ground failure, including liquefaction?
Less Than Significant Impact

iv) Landslides? ***Less Than Significant Impact***

b) Result in substantial soil erosion or the loss of topsoil?
Less Than Significant Impact

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? **No Impact**

d) Be located on expansive soil, as defined in Table 18-1 B of the Uniform Building Code (1997), creating substantial risks to life or property? ***No Impact***

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste disposal systems where sewers are not available for the disposal of waste water?
No Impact

f) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature? ***No Impact***

AFFECTED ENVIRONMENT

The study area is comprised of many steep and rugged transverse ranges, with numerous faults, folds, and down warps. The area is generally prone to landslides due to steep slopes and poorly cemented sedimentary rock. Intense development in the area in recent years has exacerbated the problem of landslides and placed structures in unsafe locations. Shallow slope failures such as mudslides and slumping have occurred where graded cut and fill slopes have been inadequately constructed. Many locations in the lowlands of the study area (Zuma Beach, Malibu Creek State Park) experience shrinkage and swelling, as well as liquefaction of soils. The area is also located in a highly active tectonic region where strong ground shaking results from earthquakes. The Malibu Coast Fault is located along the coast and is considered partially active. Besides directly damaging structures, roadways, and utilities, earthquakes could trigger landslides in unstable areas and cause liquefaction to occur.

The 2000 *Draft GMP/EIS* lists Resource Condition mission goals for subsequent development. The following goals apply to this project:

- Allow natural erosion processes to continue within the recreation area.

METHODOLOGY/SIGNIFICANCE CRITERIA

NEPA: Potential adverse effects for NEPA are considered based on the degree to which the action might adversely affect a resource or create a potential exposure to a geologic hazard, and are described by the following impact intensity levels:

- Negligible – Effects are not detectable and would have no discernible effect on public safety and soil resources.
- Minimal – Impacts are slightly detectible, but would not be expected to have an overall effect on public safety and soil resources.
- Moderate – Impacts are clearly detectable and could have an appreciable effect on public safety and soil resources.
- Major – Impacts would have a substantial, highly noticeable influence on public safety and soil resources.

CEQA: A project would have a significant effect on the environment if it would:

- Expose people or structures to major geologic hazards;
- Cause substantial erosion or siltation;
- Be located on a geologic unit or soil that is unstable or expansive;
- Have soils incapable of adequately supporting the use of septic tanks where sewers are not available; or
- Directly or indirectly destroy a unique geologic feature.

ENVIRONMENTAL CONSEQUENCES

No Action Alternative

The No Action Alternative would result in no geologic impacts.

Preferred Alternative

a) Expose people or structures to potential substantial adverse geologic effects involving:

i.) Faults: No previous fault rupture lines are evident in any of the proposed stops' boundaries. No harm to humans is anticipated to occur due to potential fault rupture. Impacts would be negligible.

ii) Seismic groundshaking: The Preferred Alternative would not increase the potential for harm to humans due to seismic groundshaking in the event of an earthquake, as it would not include implementation of unstable structures that could be dangerous to people. Impacts would be negligible.

iii) Seismic ground failure, including liquefaction: The proposed shuttle and stops would not expose people to potential harm from seismic ground failure or liquefaction, as the planned shuttle stops are not located in potential liquefaction zones. Although the **Malibu Lagoon** and **Zuma Beach** stops are located in potential liquefaction areas, soils have been adequately compacted and are paved, reducing the potential of dangerous liquefaction conditions. Impacts would be less than significant and minimal.

iv) Landslides: Most stops are located in areas that are not potentially dangerous for landslides or mudflows, so no impacts would occur. At the **Backbone Trail flag stop** and **Backbone Trail major stop**, adjacent hillsides, although not extremely steep, have the potential to slide during heavy groundshaking. As these sites are destinations for recreational visitors, the Preferred Alternative would not result in introducing new uses into these locations. It is also not anticipated that landslides or mudflows would be dangerous as the locations on-site where people would wait for shuttle arrival would be well away from steep slopes. Impacts would be less than significant and minimal.

b) Result in substantial erosion or the loss of topsoil: Although slight changes in topography will occur with minor re-grading of surfaces at **Paramount Ranch** and **Zuma Beach**, there are no unstable soil conditions at these locations, so no impacts would likely occur. As part of the National Park Service project commitments, at the **Backbone Trail** and **Peter Strauss Ranch** stops, where new trails are excavated into slopes, low retaining walls will be installed to avoid or minimize slope erosion. Thus the potential for additional soil erosion impacts would be

prevented by project elements. This would create a minor deviation to the NPS's mission goal to allow natural erosion processes to continue, which is anticipated to be a less than significant and minimal impact.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project: No subsidence impacts would occur at any of the proposed shuttle stops, as all sites are located on well-compacted, non-sloped areas. No on- or off-site landslide, lateral spreading, or collapse is anticipated.

d) Be located on expansive soil: The Preferred Alternative would not place people at risk for dangers from expansive soils.

e) Have soils incapable of adequately supporting the use of septic tanks: At the **Backbone Trail** stop, a septic tank will be used for a restroom. The soils excavated are highly compacted and would support a septic tank with no potential for soil instability. No impact would occur.

f) Unique geologic feature: The proposed shuttle and stops would not be affected by, nor have an adverse effect on, unique geologic or physical features.

CUMULATIVE IMPACTS

No Action Alternative
The No Action Alternative would not contribute to cumulative effects on geology, soils, or geologic hazards.

Preferred Alternative
The Preferred Alternative would not contribute to cumulative effects on geology, soils, or geologic hazards.

CONCLUSION

No Action Alternative
The No Action Alternative would not affect or impair geologic features nor introduce people to significant dangerous geologic conditions.

Preferred Alternative
The Preferred Alternative would not affect or impair geologic features nor introduce people to significant dangerous geologic conditions.

5.7 HAZARDS AND HAZARDOUS MATERIALS

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? ***No Impact***

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? ***Less Than Significant Impact***

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? ***No Impact***

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? ***No Impact***

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? ***No Impact***

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? ***No Impact***

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? ***No Impact***

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? ***Less Than Significant Impact***

AFFECTED ENVIRONMENT

Many locations in the study area are in designated fire hazard areas, especially in dry and windy months. Although the study area roadways are not highly traveled by trucks, there is always a potential for accidental spills of hazardous materials or waste. None of the existing facilities at the stops are considered to be potentially hazardous or contain hazardous materials or waste (Fidelity National, 2002).

METHODOLOGY/SIGNIFICANCE CRITERIA

NEPA: Potential adverse effects for NEPA are considered based on the degree by which the action would introduce or expose people to hazardous materials/waste, and are described by the following intensity levels:

- Negligible – Effects that are not detectable and would have no discernible hazardous effect on human health.
- Minimal – Effects that are slightly detectible, but would not be expected to have a hazardous effect on human health.
- Moderate – Effects that are clearly detectable and could have an appreciable hazardous effect on human health.
- Major – Effects that would have a substantial, highly noticeable hazardous effect on human health.

CEQA: A project would have a significant effect on the environment if it would:

- Create a significant hazard to the public or environment through the routine transport or reasonably foreseeable upset/accident conditions of hazardous materials;
- Emit hazardous emissions within one-quarter mile of an existing or proposed school;
- Be located on a site designated by Government Code Section 65962.5 as a hazardous waste site;

- Be located within an airport land use plan or within the vicinity of a private airstrip, and have an effect on safety;
- Impair an adopted emergency response or evacuation plan; or
- Expose people or structures to a significant risk involving wildland fires.

Regulatory Compliance:

- *Americans with Disabilities Act (California Code Sections 4450 et seq.)* – Prescribes that public facilities be made accessible to persons with disabilities.

ENVIRONMENTAL CONSEQUENCES

No Action Alternative

The No Action Alternative would not result in any additional potential hazard impacts. Impacts would be negligible.

Preferred Alternative

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials: The shuttle system and most stop facilities would not result in any potential health hazards.

At the **Backbone Trail** stop, a pre-constructed concrete vault toilet will be located to the west of the parking lot. There is a very low risk anticipated for leak of hazardous materials from this toilet into the ground because of its construction type. As part of the project commitments, the new public restroom will be maintained by the NPS. Any waste will be properly disposed of using a suction hose from a maintenance truck.

As part of NPS's project commitments, the proposed widened trail, sidewalk, grade slopes, and shuttle access improvements at all shuttle stops will be in compliance with the *Americans with Disabilities Act.* No health hazard or potential health hazard would be created.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment: Construction and operation of the proposed shuttle system would result in a less than significant and minimal risk for increase of accidental explosion or release of hazardous substances. The shuttles used for the transit service will be new and will be well-maintained during the service life of each shuttle bus.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school: No schools are located within one-quarter mile of the project. No impact would occur.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment: The proposed shuttle stops are not located on any identified hazardous material sites. No impact would occur.

e) Within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area: The project is not located within two miles of a public airport. No impact would occur.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area: The project is not located within the vicinity of a private airstrip. No impact would occur.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan: Construction and operation of the proposed shuttle system would not interfere with any emergency response or evacuation plans.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires: Although some of the inland locations for the shuttle stops are located in fire hazard areas, the Preferred Alternative would have minimal potential to increase fire risk from the increased public access. Furthermore, the shuttles would not create sparks that could ignite fires in these areas. Impacts would be less than significant and minimal.

CUMULATIVE IMPACTS

No Action Alternative
The No Action Alternative would not contribute to cumulative effects on hazards.

Preferred Alternative
The Preferred Alternative would not contribute to cumulative effects on hazards.

CONCLUSION

No Action Alternative
The No Action Alternative would not create, or expose, people to new hazards.

Preferred Alternative
The Preferred Alternative would minimally create, or expose, people to new hazards.

5.8 HYDROLOGY AND WATER QUALITY

Would the project:

a) Violate any water quality standards or waste discharge requirements? ***Less Than Significant Impact***

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level? ***No Impact***

c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation? ***Less Than Significant Impact***

d) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding?
Less Than Significant Impact

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
Less Than Significant Impact

f) Substantially degrade water quality? ***No Impact***

g) Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map, or other flood hazard delineation maps?
No Impact

h) Place structures that would impede or redirect flood flows within a 100-year flood hazard area? ***Less Than Significant Impact***

i) Expose people or structures to a significant risk of loss, injury, or death from flooding, including flooding resulting from the failure of a levee or dam? ***No Impact***

j) Result in inundation by seiche, tsunami, or mudflow? ***No Impact***

AFFECTED ENVIRONMENT

The study area is comprised of numerous streams within water basins and isolated drainages. For most of the proposed shuttle stops along the shuttle loop, floodplains have not been delineated because of the lack of major development (FEMA, 1985). Debris flows, created by dense sedimentation in waters, are a natural hazard in the area, acting as a destructive force when enough momentum is generated. There are localized surface runoff problems in the area as a result of development that cause pollution and sedimentation. Groundwater aquifers are generally unidentified in most of the project area, especially in the mountainous parts.

The 2000 *Draft GMP/EIS* lists Access and Transportation mission goals for subsequent development. The following goals apply to water:

- Maintain or improve water quality throughout the SMMNRA. Manage riparian communities, natural stream characteristics, estuaries and coastal waters for their significant ecological value.

METHODOLOGY/SIGNIFICANCE CRITERIA

NEPA: Potential adverse effects for NEPA are considered based on the degree to which the action might directly or indirectly adversely affect a surface water or groundwater resource, and are described by the following impact intensity levels:

- Negligible – Effects are not detectable and would have no discernible effect on hydrology or quality of water bodies, and would not affect human life or property.
- Minimal – Effects are slightly detectable but are not expected to have an overall effect on the character of water bodies or floodplains. Also, effects that increase accessibility to floodplains for short duration with no structures or camping.

- Moderate – Impacts are clearly detectable and could have an appreciable effect on hydrologic processes, the adjacent floodplain, or water quality. Also, overnight occupation by a small number of people and a limited number of structures in floodplains.
- Major – Impacts would have a substantial, highly noticeable influence on the hydrologic environment and could permanently alter hydrologic processes, floodplain formation and evolution, and water quality. Also, construction of multiple structures in floodplains or other features that would increase access to flood plains or encourage activities of extended duration.

CEQA: A project would have a significant effect on the environment if it would:

- Violate water quality standards;
- Substantially degrade or deplete groundwater resources or recharge;
- Contribute to on- or off-site erosion or siltation;
- Cause substantial on- or off-site flooding;
- Create polluted runoff;
- Substantially degrade water quality;
- Place structures within a 100-year flood hazard area;
- Expose people or structures to flooding from dam or levee failure; or
- Result in inundation by seiche, tsunami, or mudflow.

Regulatory Compliance:

- *Clean Water Act: National Pollutant Discharge Elimination System (NPDES)* – required for all point source discharges of pollutants to surface waters. Storm water discharges are regulated under this permit.
- *Flood Plain Management* – The NPS manages floodplains in accordance with Executive Order 11988, "Flood Plain Management" and NPS Special Directive 93-4. In brief, NPS policy is to protect natural floodplain values and functions and to minimize risk to life or property by avoiding the use of the regulatory floodplain whenever there is a feasible alternative location.

ENVIRONMENTAL CONSEQUENCES

No Action Alternative

The No Action Alternative would result in negligible water impacts, because no waterways, floodplains, or other water resources would be affected.

Preferred Alternative

a) Violate any water quality standards or waste discharge requirements: At the **Malibu Creek**, **Zuma Beach**, **Backbone Trail**, and **Rocky Oaks** shuttle stops, asphalt paving would be applied to parts of the ground surface to allow shuttle access. At all of these locations, the amount of paving would be minor and would not significantly affect water absorption, drainage, or runoff. At **Paramount Ranch** chip seal would be added to the surface, and at **Tapia Park** and **Peter Strauss Ranch** new decomposed granite would be added. The project would not substantially add new runoff or introduce waste discharge to the area because of this minimal paving, and a less than significant and minimal impact would occur.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level: Although some paving would be introduced, no substantial depletion of groundwater supplies or interference with groundwater recharge would occur. No impacts are anticipated to occur.

c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation: The drainage patterns for each shuttle stop would not be substantially altered so as to result in on- or off-site erosion or siltation. A less than significant and minimal impact would occur.

d) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding: At the three stops where asphalt paving would be applied, the amount of paving would be minimal and would not substantially alter the existing drainage pattern of the site or area. Less than significant impacts to on- or off-site flooding are anticipated.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff: At the three stops where asphalt paving would be applied, the amount of paving would be minimal and would not significantly affect runoff amount or quality. Impacts would be less than significant and minimal.

f) Substantially degrade water quality: As the project would not result in substantial surface or ground water pollution, no impacts are anticipated to occur. Furthermore, the NPS mission goal to maintain water quality would be upheld.

g) Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map, or other flood hazard delineation maps: The project would not involve introducing new housing in the area. No impacts would occur.

h) Place structures that would impede or redirect flood flows within a 100-year flood hazard area: The Preferred Alternative would not result in placing people in highly flood-prone areas. The **Peter Strauss Ranch** stop has a history of flash flooding in Triunfo Canyon (Philip Holmes, NPS Staff, 2002), even though Triunfo Canyon is not officially designated in the 100-year flood zone (FEMA, 1987). The shuttle stop would only temporarily place people in this floodplain, which is considered a less than significant and minimal impact.

i) Expose people or structures to a significant risk of loss, injury, or death from flooding, including flooding resulting from the failure of a levee or dam: The proposed shuttle route and stops are not located within any levee or dam inundation zones. No impact would occur.

j) Result in inundation by seiche, tsunami, or mudflow: At planned shuttle stops along the Malibu shoreline (**Malibu Lagoon**, **Zuma Beach**, and other flag stops) where tsunamis are potential impacts, the Preferred Alternative would not result in placing humans in additional harm for tsunamis. No seiche or volcanic hazards would occur. Impacts would be negligible.

CUMULATIVE IMPACTS

No Action Alternative
The No Action Alternative would not contribute to cumulative effects on water or water hazards.

Preferred Alternative
The Preferred Alternative would not contribute to cumulative effects on water or water hazards.

CONCLUSION

No Action Alternative
The No Action Alternative would not affect or impair water resources or place people in dangerous water resource conditions.

Preferred Alternative
The Preferred Alternative would not affect or impair water resources or place people in dangerous water resource conditions.

5.9 LAND USE AND PLANNING

Would the project:

a) Physically divide an established community? ***No Impact***

b) Conflict with the applicable land use plan, policy, or regulation of any agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? ***Less Than Significant Impact***

c) Conflict with any applicable habitat conservation plan or natural community conservation plan? ***No Impact***

AFFECTED ENVIRONMENT

The project study area is located within the Santa Monica Mountains National Recreation Area (SMMNRA). The SMMNRA, established in 1978, is the largest urban National Park in the National Park System. The park encompasses roughly 149,300 acres. The park is approximately 7 miles in width and extends 46 miles from the Hollywood Bowl near Los Angeles to Point Mugu on the Pacific Coast.

Land Ownership
The SMMNRA is a patchwork of land ownership. The largest amount of acreage is in private ownership with 76,000 acres or 54 percent of the available land. The largest public landowner within the Recreation Area is the State of California Parks Department (California State Parks or CSP) with 33,271 acres or 22 percent. The National Park Service manages about 21, 832 acres or 14 percent of the land within the Recreation Area. The Santa Monica Mountains Conservancy Land administers to 7,392 acres or 4 percent of land within the Recreation Area. Other land holdings within the Recreation Area include city and county parkland, conservation lands, and other types of land trusts and holdings.

Public Parkland Ownership/Land Uses
Although the National Park Service "oversees" the SMMNRA, the Heart-of-the-Park Shuttle System will utilize various shuttle stops along the proposed loop route that are under different governmental management jurisdictions. Shuttle stops that utilize National Park Service units include Paramount Ranch, Rocky Oaks, Solstice Canyon, and Peter Strauss Ranch. Stops utilizing California State Parks include Malibu Creek State Park and Malibu Lagoon State Park.

Draft General Management Plan/Environmental Impact Statement
The Draft General Management Plan/Environmental Impact Statement (GMP/EIS) for the SMMNRA was distributed for public review in December, 2000. The general management plan and accompanying environmental impact statement represents the ultimate vision for the National Park Service, the State of California Department of Parks, and the Santa Monica Mountains Conservancy. The actions detailed in the GMP/EIS provide a framework for management and implementation plans that could be implemented in 10 years or more once the document is approved.

The Draft GMP/EIS identified several Mission Goals for the SMMNRA. Among those Mission Goals included goals for resource conditions, land use and ownership, visitor experience, education and interpretation, access and transportation, and operations. Among the access and transportation goals there are four goals that are relevant to the proposed shuttle system:

- Improve the visitor experience and protect park resources by reducing the number of vehicles that use the roads within the SMMNRA;
- De-emphasize the use of private vehicles and making the recreation area accessible to a greater portion of the public by providing a wider range of transportation alternatives;
- Explore the feasibility of providing a shuttle system within the park;
- Improve the air quality by encouraging the use of alternative forms of transportation and the use of alternative fuels.

The Draft GMP/EIS evaluates the No Action Alternative plus four action alternatives including the Preferred, Preservation, Education, and the Recreation Alternatives. All four of the action alternatives include project components of a tourist shuttle system that uses the existing transportation roadways to transport visitors within the park and surrounding areas.

Private Ownership/Land Uses
The study area is located within SMMNRA within the unincorporated areas of Los Angeles County and the city of Malibu. Land uses within the unincorporated portions of the SMMNRA and the project area are primarily open space with scattered rural residences, rural communities, and some suburban residential tracts. Along the southern coastal portion of county, land uses within the city of Malibu vary from commercial and high-density residential along the Pacific Coast Highway.

Planned land uses based on both agencies' general plans consist of mainly residential, existing parkland (both NPS and CSP), and open space to be acquired for future parkland or to minimal development (Los Angeles County, 1998; City of Malibu, 1995). The City of Malibu defers to the California Coastal Commission for approval of projects in the Coastal Zone. The Coastal Commission supports that no new development within the coastal zone results in impeding beach access, reducing beach parking, or being visually intrusive (Barbara Carey, March 15, 2002).

METHODOLOGY/SIGNIFICANCE CRITERIA

NEPA: In general, under NEPA the potential adverse effects are evaluated in terms of the projects' compatibility with existing land uses. Land use impact intensity is characterized by using a scale of negligible, minimal, moderate, or major as follows.

- Negligible – Impacts would occur if effects were not detectable and would have no discernible effect on land use patterns or land use compatibility.
- Minimal – Impacts would result if effects were slightly detectible, but would not be expected to have an overall effect on land use patterns or land use compatibility.
- Moderate – Impacts would occur if impacts were clearly detectable and could have an appreciable effect on land use patterns and result in land use incompatibility.
- Major – Impacts would occur if effects would have a substantial highly noticeable land use incompatibility or would result in substantial changes to land use patterns.

CEQA: A project would have a significant effect on the environment if it would:

- Physically divide an established community;
- Conflict with applicable land use plans, policies, or regulations; or
- Conflict with habitat conservation plans.

Regulatory Compliance:

- *Coastal Zone Management Act (CZMA)* – Portions of the SMMNRA are within the coastal zone. Federally owned lands are subject only to the CZMA. The California Coastal Commission would conduct a consistency review with the CZMA to determine whether or not the specific projects would have significant effects on coastal resources.
- *California Coast Act (Public Resources Code Sections 30000 et. seq.)* – A coastal development permit must be obtained from the California Coastal Commission for the development activities within the coastal zone, including state coastal waters that are not on federal lands.

ENVIRONMENTAL CONSEQUENCES

No Action Alternative

The No Action Alternative would conflict with several of the Draft GMP's Mission Goals to use alternative transportation more fuel-efficient modes. The No Action Alternative would have a less than significant and minor impact.

Preferred Alternative

a) Physically divide an established community: The proposed shuttle system will utilize existing and established roads and parking areas within the park, and would not have the potential to disrupt or divide an established community. Although construction would result in temporary restrictions on access, it would not divide the physical arrangement of an established community. Park visitors from the adjacent communities and other outlying areas would use the Heart-of-the-Park shuttle route and would be better linked by the Preferred Alternative. No impact would occur.

b) Conflict with the applicable land use plan, policy, or regulation of any agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect: The proposed shuttle service and planned stops would not be incompatible with existing or planned

land uses or zoning in the project area. Every shuttle stop is already used for vehicular parking and recreation. The shuttle system would provide an additional means for public transportation to these sites, which would not affect the existing or intended land uses. The Preferred Alternative is consistent with many of the GMP's Mission Goals to use alternative transportation and fuels. Furthermore, the Preferred Alternative would be consistent with the California Coastal Commission's Local Coastal Plan, as it would have only benign impacts on land uses and would not restrict access. Improvements would also be visually consistent with existing facilities (see Appendix A for typical improvements design and Zuma Beach illustrative drawing). Impacts would be minimal and less than significant.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan: There are no applicable habitat conservation plans in the project area. No impacts would occur.

CUMULATIVE IMPACTS

No Action Alternative
The No Action Alternative would not contribute to cumulative effects on land use in the area.

Preferred Alternative
The Preferred Alternative would not contribute to cumulative effects on land use in the area.

CONCLUSION

No Action Alternative
The No Action Alternative would not affect or impair existing or planned land uses in the Park or adjacent areas.

Preferred Alternative
The Preferred Alternative would not affect or impair existing or planned land uses in the Park or adjacent areas.

5.10 MINERAL RESOURCES

Would the project:

a) Result in the loss of availability of a known mineral resource that is or would be of value to the region and the residents of the state? ***No Impact***

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? ***No Impact***

AFFECTED ENVIRONMENT

Electricity and natural gas are the main sources of energy used in the study area. A large part of energy consumption continues to be dominated by transportation, which is increasing along with growth in southern California. Although the average fuel economy of these vehicles has improved, the fuel savings achieved are less noticeable due to an increase in the number of miles traveled (California Energy Commission, 2000).

No parts of the study area are defined as mineral resource zones.

METHODOLOGY/SIGNIFICANCE CRITERIA

NEPA: Potential adverse effects for NEPA are considered based on the degree by which the action would deplete non-renewable energy resources, and are described by the following intensity levels:

- Negligible – Effects that are not detectable and would have no discernible effect on non-renewable energy resources.
- Minimal – Effects that are slightly detectible, but would not be expected to have an overall effect on non-renewable energy resources.
- Moderate – Effects that are clearly detectable and could have an appreciable effect on non-renewable energy resources.
- Major – Effects that would have a substantial, highly noticeable influence on non-renewable energy resources.

CEQA: A project would have a significant effect on the environment if it would:

- Result in the loss of availability of a valuable mineral resource or recovery site.

ENVIRONMENTAL CONSEQUENCES

No Action Alternative

The No Action Alternative would result in the same, if not increased, consumption of non-renewable resources for vehicle travel. It would not conflict with adopted energy conservation plans nor result in the loss of availability of a known mineral resource. Impacts would be negligible to minimal.

Preferred Alternative

a) Result in the loss of availability of a known mineral resource that is or would be of value to the region and the residents of the state: No known mineral resources have been identified within the project area. No impacts would occur.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan: There are no designated mineral resource zones within the project area, so the Preferred Alternative would have no impacts to mineral resources.

CUMULATIVE IMPACTS

No Action Alternative

The No Action Alternative would not contribute to cumulative effects on mineral resources.

Preferred Alternative

The Preferred Alternative would not contribute to cumulative effects on mineral resources.

CONCLUSION

No Action Alternative

The No Action Alternative would not negatively affect or impair mineral resources.

Preferred Alternative
The Preferred Alternative would not negatively affect or impair mineral resources.

5.11 NOISE

Would the project:

a) Generate or expose people to noise levels in excess of standards established in a local general plan or noise ordinance, or in other applicable local, state, or federal standards? ***No Impact***

b) Generate or expose people to excessive groundborne vibrations or groundborne noise levels? ***No Impact***

c) Create a substantial permanent increase in ambient noise levels in the vicinity of the project (above levels without the project)? ***No Impact***

d) Create a substantial temporary or periodic increase in ambient noise levels in the vicinity of the project, in excess of noise levels existing without the project? ***Less Than Significant Impact***

e) Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport? If so, would the project expose people residing or working in the project area to excessive noise levels? ***No Impact***

f) Be in the vicinity of a private airstrip? If so, would the project expose people residing or working in the project area to excessive noise levels? ***No Impact***

AFFECTED ENVIRONMENT

The vast majority of the lands within the SMMNRA fall within Category B of the FHWA Noise Abatement Criteria, which means that exterior noise is not allowed to exceed an average of 66 decibels per hour (dBA). Although some locations of the project area are commercial in nature (Category C, not allowed to exceed an average of 71 dBA per hour), much of the study area is located along rural residential roadways with moderate traffic levels.

METHODOLOGY/SIGNIFICANCE CRITERIA

NEPA: Potential adverse effects for NEPA are considered based on the degree by which the action would increase existing noise levels or expose people to noise, and are described by the following intensity levels:

- Negligible – Noise increases that are not detectable and would have no discernible effect on human exposure to noise.
- Minimal – Noise increases that are slightly detectible, but would not be expected to have an overall effect on human exposure to noise.
- Moderate – Noise increases that are clearly detectable and could have an appreciable effect on human exposure to noise.
- Major – Effects that would have a substantial, highly noticeable effect on human exposure to noise.

CEQA: A project would have a significant effect on the environment if it would:

- Generate or expose people to noise, groundborne noise, or groundborne vibration levels in excess of local, state, or federal standards;
- Create a substantial permanent or temporary increase in ambient noise levels in the vicinity of the project; or
- Expose people to excessive noise levels within two miles of a public airport, or within the vicinity of a private airstrip.

ENVIRONMENTAL CONSEQUENCES

No Action Alternative

The No Action Alternative would result in the same, if not increased, noise along the project's roadways, due to increased vehicular traffic over time. Impacts would be minimal to moderate.

Preferred Alternative

a) Generate or expose people to noise levels in excess of standards established in a local general plan or noise ordinance, or in other applicable local, state, or federal standards: Construction and operation of the proposed shuttle system would result in no significant increases in existing noise levels. It is anticipated that the Preferred Alternative would not raise noise levels in excess of any local standards, considering the existing traffic and visitors at all of the stops. No impact would occur.

b) Generate or expose people to excessive groundborne vibrations or groundborne noise levels: The Preferred Alternative would not generate or expose people to groundborne vibration or noise levels. No impact would occur.

c) Create a substantial permanent increase in ambient noise levels in the vicinity of the project: The Preferred Alternative would not create a substantial permanent increase in ambient noise levels, as it would only add shuttle service to areas that already experience vehicular noise levels. No impact would occur.

d) Create a substantial temporary or periodic increase in ambient noise levels in the vicinity of the project, in excess of noise levels existing without the project: Construction noise at each of the stops would be minimal and temporary. Although the stops do not regularly experience construction noise, this construction would not involve extremely loud equipment nor require a long construction period. The impact is temporarily minimal, and overall less than significant.

e) Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport? If so, would the project expose people residing or working in the project area to excessive noise levels: The Preferred Alternative is not located within two miles of a public airport. No impact would occur.

f) Be in the vicinity of a private airstrip? If so, would the project expose people residing or working in the project area to excessive noise levels: The proposed shuttle and stops is not located in the vicinity of a private airstrip. No impact would occur.

CUMULATIVE IMPACTS

No Action Alternative
The No Action Alternative would not contribute to cumulative effects on noise or noise receptors.

Preferred Alternative
The Preferred Alternative would not contribute to cumulative effects on noise or noise receptors.

CONCLUSION

No Action Alternative
The No Action Alternative would have minimal to moderate effects by creating and exposing people to additional noise levels.

Preferred Alternative
The Preferred Alternative would not create or expose people to new noise levels.

5.12 POPULATION AND HOUSING

Would the project:

a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)? ***No Impact***

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? ***No Impact***

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? ***No Impact***

AFFECTED ENVIRONMENT

Within the SMMNRA, approximately 76,000 acres or 54 percent of the available land is under private ownership while 73,300 acres or 46 percent is under public control. Land outside the jurisdiction of the National Park Service, State of California Department of Parks, Los Angeles County Department of Parks, or other city parklands and public trusts, are subject to local county and city planning and development regulations.

Los Angeles County has a high population growth rate, with increasing housing demand and decreasing availability in many areas. The Santa Monica Mountains are affected in that where private land is available and residences permitted, housing will be constructed rapidly to provide for the high demand of housing in Los Angeles County. Employment is also relatively high and generally increasing, which forecasts additional housing demand for the future.

METHODOLOGY/SIGNIFICANCE CRITERIA

NEPA: Potential adverse effects for NEPA are considered based on the project elements' potential to increase the demand for population, housing, and employment. This impact intensity is characterized by using a scale of negligible, minimal, moderate, or major as follows.

- Negligible – Effects are not detectable and would have no discernible effect on the local population or work force.
- Minimal – Impacts are slightly detectible, but would not be expected to have an overall effect on the local population or work force.
- Moderate – Impacts are clearly detectable and could have an appreciable effect on the local population or work force.
- Major – Impacts would be highly noticeable and would result in substantial changes to the local population or work force.

CEQA: A project would have a significant effect on the environment if it would:

- Induce substantial growth or concentrations of populations; or
- Displace substantial numbers of houses or people.

Regulatory Compliance:

- *Environmental Justice (Executive Order 12898)* – "Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations," requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low income populations and communities.

ENVIRONMENTAL CONSEQUENCES

No Action Alternative

The No Action Alternative would result in negligible population or housing impacts.

Preferred Alternative

a) Induce substantial population growth in an area, either directly or indirectly: The Preferred Alternative would not induce substantial growth either directly or indirectly. Although the shuttle system would provide alternative methods of transportation making park visitation more attractive, this is not anticipated to result in indirectly inducing growth, and no impact would occur.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere: The proposed shuttle and stops would not displace any housing. No impact would occur.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere: The proposed shuttle and stops would not displace any people. No impact would occur.

No negative impacts would occur to minority or low-income populations or communities, as the proposed shuttle system and stops would not restrict any person's access or divide a community. The proposed shuttle system may provide minority and low-income populations with some increased access to the SMMNRA, which would be a beneficial effect.

CUMULATIVE IMPACTS

No Action Alternative
The No Action Alternative would not contribute to cumulative effects on population or housing.

Preferred Alternative
The Preferred Alternative would not contribute to cumulative effects on population or housing.

CONCLUSION

No Action Alternative
The No Action Alternative would not affect or impair population or housing.

Preferred Alternative
The Preferred Alternative would not affect or impair population or housing.

5.13 PUBLIC SERVICES

Would the project:

a) Result in significant environmental impacts from construction associated with the provision of new or physically altered government facilities, or the need for new or physically altered government facilities, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: ***No Impact***

Fire protection? ***No Impact***

Police protection? ***No Impact***

Schools? ***No Impact***

Parks? ***No Impact***

Other public facilities? ***No Impact***

AFFECTED ENVIRONMENT

Public safety and law enforcement services are provided throughout the study area by the NPS Visitor Safety Services (VSS), California State Parks rangers and lifeguards, and the Los Angeles County Sheriff's Department. Visitor Safety Services also provides fire suppression, along with Los Angeles County Fire Department.

Public schools in the area are available to provide education to local residents.

Public roads are maintained by the County of Los Angeles Public Works Department for Kanan Dume Road, Malibu Canyon Road, and Mulholland Highway. The California Department of Transportation (Caltrans) District 7 maintains the Pacific Coast Highway.

METHODOLOGY/SIGNIFICANCE CRITERIA

NEPA: Potential adverse effects for NEPA are considered based on the degree by which the action would burden existing public services or require the need for new public services, and are described by the following intensity levels:

- Negligible – Effects that are not detectible and would have no discernible effect on public services.
- Minimal – Effects that are slightly detectible, but would not be expected to have an overall effect on public services.
- Moderate – Effects that are clearly detectible and could have an appreciable effect on public services.
- Major – Effects that would have a substantial, highly noticeable influence on public services.

CEQA: A project would have a significant effect on the environment if it would:

- Result in significant environmental impacts to fire, police, school, parks, or other public facilities and/or service.

ENVIRONMENTAL CONSEQUENCES

No Action Alternative

The No Action Alternative would result in the same, if not increased, traffic congestion along the project roadways, and has a potential to eventually conflict with public services. Impacts are anticipated to be less than significant and minimal.

Preferred Alternative

a) Result in significant environmental impacts from construction associated with the provision of new or physically altered government facilities, or the need for new or physically altered government facilities, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: Overall, the Preferred Alternative would have no impact on any local public services. See below for detailed explanations for each service.

Fire Protection: The Los Angeles County Fire Department provides fire protection service to the project area. Construction and operation of the proposed shuttle system would not hinder fire protection response times or reliability, as it would not alter emergency routes nor significantly slow traffic down. It would also not necessitate new associated facilities or services. No impact would occur.

Police Protection: The Los Angeles County Sheriff's Department provides police protection in the area. Construction and operation of the proposed shuttle system would not hinder police protection response times or reliability, as it would not alter emergency routes nor significantly decrease traffic. It would also not require new police facilities or services. No impact would occur.

Schools: Construction and operation of the proposed shuttle system would not have an adverse effect on schools, nor would it require new school facilities or services. No impact would occur.

Parks: The proposed shuttle system would not burden or interfere with parks. Overall, the Preferred Alternative would result in providing more weekend access to parks in the area and enhance the visitor's experience in parks. No impact would occur.

Other public services: The proposed shuttle system would not adversely affect other public services. In some cases, such as government resource or recreational services, the proposed project would be beneficial in providing a new transit system linking several parks and recreation areas. No impact would occur.

CUMULATIVE IMPACTS

No Action Alternative
The No Action Alternative would not contribute to cumulative effects on public services.

Preferred Alternative
The Preferred Alternative would not contribute to cumulative effects on public services.

CONCLUSION

No Action Alternative
The No Action Alternative would not negatively affect or impair public services.

Preferred Alternative
The Preferred Alternative would not negatively affect or impair public services.

5.14 RECREATION

Would the project:

a) Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated? ***Less Than Significant Impact***

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? ***Less Than Significant Impact***

AFFECTED ENVIRONMENT

Recreational activities in the SMMNRA are plentiful, as the area serves as a regional open space and recreation area for much of the Los Angeles and Ventura County areas. Current annual carrying capacity for the SMMNRA is in excess of 33 million recreation visits. Recreational uses consist of pedestrians (hiking, running), mountain bikes, and equestrians. The Backbone Trail, which spans between the Backbone Trailhead major stop and Backbone Trailhead flag stop, is a popular trail, as are the trails within Malibu Creek State Park. No Wild and Scenic Rivers have been identified in the vicinity (USGS, 1992). Weekends are the most popular times for recreational activities in the area.

The *Draft GMP/EIS* lists Visitor Experience mission goals for subsequent development. The following goals apply to this project:

- Create a seamless, enjoyable experience for visitors.
- Make facilities, programs, and services of the recreation area reasonably accessible to all people, including those with disabilities.
- Encourage safe and enjoyable resource use and protection. Place information and interpretation at appropriate locations throughout the recreation area and nearby communities. Visitors with differing levels of interest and understanding should easily find the area's cultural and natural features, visitor facilities, activities, and services.
- Create an experience that may increase visitor appreciation and awareness of the environment and historic sites within the SMMNRA and their place in the history of California.

METHODOLOGY/SIGNIFICANCE CRITERIA

NEPA: Potential adverse effects for NEPA are considered based on the degree by which the action would have impacts on recreational opportunities or designated Wild and Scenic Rivers, or result in hindering visitors' experiences, and are described by the following intensity levels:

- Negligible – Effects are not detectable and would have no discernible effect on recreational opportunities or visitors' experiences.
- Minimal – Impacts are slightly detectible, but would not be expected to have an overall effect on recreational opportunities or visitors' experiences.
- Moderate – Impacts are clearly detectable and could have an appreciable effect on recreational opportunities or visitors' experiences.
- Major – Impacts would have a substantial, highly noticeable influence on recreational opportunities or visitors' experiences.

CEQA: A project would have a significant effect on the environment if it would:

- Increase the use of existing recreational facilities such that substantial physical deterioration would occur; or
- Include or require the construction of recreational facilities that would have an adverse physical effect on the environment.

Regulatory Compliance:

- *Americans with Disabilities Act (California Code Sections 4450 et seq.)* – Prescribes that public facilities be made accessible to persons with disabilities.

ENVIRONMENTAL CONSEQUENCES

No Action Alternative

The No Action Alternative would result in continued, if not worse, traffic congestion levels in the project vicinity, which has a negative impact on parks, recreational facilities, and recreational opportunities; and if traffic were to worsen, less visitors would visit the SMMNRA. This would also conflict with the NPS's mission goal to create a seamless, enjoyable experience for visitors. Impacts would be minimal to moderate.

Preferred Alternative

a) Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated: The proposed shuttle system would result in increasing the use of the several parks associated with the

proposed stops. This is not anticipated to accelerate the physical deterioration of any of these facilities, as they are well-maintained, well-monitored, and would not reach their capacity for visitors with the Preferred Alternative. Less than significant and minimal impacts are anticipated.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment: The Preferred Alternative would not have an adverse effect on existing recreational opportunities. Operation impacts of the proposed shuttle and stops would be less than significant at worst, and ultimately provide more education about recreational facilities so as to bring about visitors' respect for existing facilities. Although construction would result in noise and access impacts to recreational uses and their physical surroundings, such impacts would be temporary and therefore minimal and less than significant. All new facilities associated with the shuttle service would be visually compatible with existing facilities (see Appendix A for typical improvement designs). The Preferred Alternative would also support the NPS's mission goals to enhance the visitor's experience to the SMMNRA.

As part of NPS's project commitments, the proposed widened trail, sidewalk, grade slopes, and shuttle access improvements at all shuttle stops will be in compliance with the *Americans with Disabilities Act.* This would allow the Preferred Alternative to support the NPS's mission goal to make facilities accessible to all people.

CUMULATIVE IMPACTS

No Action Alternative
The No Action Alternative would not contribute to cumulative effects on recreation.

Preferred Alternative
The Preferred Alternative would not contribute to cumulative effects on recreation.

CONCLUSION

No Action Alternative
The No Action Alternative would potentially negatively affect or impair recreation or the visitors' experience.

Preferred Alternative
The Preferred Alternative would not negatively affect or impair recreation or the visitors' experience.

5.15 TRANSPORTATION/TRAFFIC

Would the project:

a) Cause a substantial increase in traffic, in relation to existing traffic and the capacity of the street system (i.e., a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? ***No Impact***

b) Exceed, individually or cumulatively, the level of service standards established by the county congestion management agency for designated roads or highways? ***No Impact***

c) Cause a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks? ***No Impact***

d) Contain a design feature (e.g., sharp curves or a dangerous intersection) or incompatible uses (e.g., farm equipment) that would substantially increase hazards? ***Less Than Significant with Mitigation***

e) Result in inadequate emergency access? ***No Impact***

f) Result in inadequate parking capacity? ***Less Than Significant Impact***

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? ***No Impact***

AFFECTED ENVIRONMENT

The Pacific Coast Highway (PCH) and the Ventura Freeway (US-101) serve as major east-west arterials for commuters, connecting Los Angeles with the residential areas along the coast and Ventura County. Malibu Canyon Road and Kanan Dume Road are north-south arterial roadways provide localized access to the central portion of the SMMNRA. These arterial roadways are used by local commuters driving to or from PCH and US-101.

Both Malibu Canyon and Kanan Dume Roads are presently at unacceptable levels of service (LOS) during morning and evening peak hours. LOS refer to how much traffic is utilizing a roadway compared to its capacity, where LOS A would mean little to no traffic congestion, and LOS F would be the worst congestion possible. The 1998 Average Daily Traffic (ADT) volumes for Malibu Canyon Road from PCH to Mullholland Highway is 22,800 vehicles with a LOS E. Kanan Dume Road from PCH to Mullholland Highway has an ADT of 10,700 vehicles with an LOS of E. According to 1998 figures, PCH is currently experiencing: An ADT of 26,000 vehicles west of Corral Canyon Road, with an LOS of B; an ADT of 31,900 between Malibu Canyon Road and Corral Canyon Road, with an LOS of B; and much higher volumes of traffic on PCH east of the study area. These roadways are also experiencing heavy congestion on the weekends from recreational travel. Mullholland Highway between Malibu Canyon and Kanan Dume Roads is lightly traveled.

Public transit is provided by the Metropolitan Transit Authority (MTA) routes 161 and 434. These routes provide bus transit near US-101 and along PCH, respectively.

Available parking at many of the proposed shuttle stops is limited and close to or exceeds capacity on weekends, especially at Zuma Beach, Tapia Park, and Malibu Lagoon. Summer months are especially high in terms of parking demand, while parking capacity can also be strained in the winter months, at times when the weather is clear and mild.

The 2000 *Draft GMP/EIS* lists Access and Transportation mission goals for subsequent development. The following goals apply to transportation:

- Improve the visitor experience and protect park resources by reducing the number of vehicles that use the roads within the NRA.
- De-emphasize the use of private vehicles and make the recreation area accessible to a greater portion of the public by providing a wider range of transportation alternatives.
- Explore the feasibility of providing a shuttle system within the park.

METHODOLOGY/SIGNIFICANCE CRITERIA

NEPA: Potential adverse effects for NEPA are considered based on the degree by which the action would introduce or increase impacts to traffic safety and circulation, and are described by the following intensity levels:

- Negligible – Effects that are not detectable and would have no discernible effect on traffic flow and/or traffic safety conditions.
- Minimal – Effects that are slightly detectable, but would not be expected to have an overall effect on traffic flow and/or traffic safety conditions.
- Moderate – Effects that are clearly detectable and could have an appreciable effect on traffic flow and/or traffic safety conditions.
- Major – Effects that would have a substantial, highly noticeable influence on traffic flow and/or traffic safety conditions.

CEQA: A project would have a significant effect on the environment if it would:

- Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system;
- Exceed the level of service standards established by local agencies;
- Cause a change in air traffic patterns that results in substantial safety risks;
- Contain a design feature or incompatible uses that would substantially increase hazards;
- Result in inadequate emergency access;
- Result in inadequate parking capacity; or
- Conflict with adopted policies, plans, or programs supporting alternative transportation.

ENVIRONMENTAL CONSEQUENCES

No Action Alternative

Under the No Action Alternative the roads serving the SMMNRA would continue to provide vehicle access to and within recreational destinations and parklands, private lands, and residences within the SMMNRA. Based on 2015 traffic projections, Malibu Canyon Road (from PCH to Mullholland Highway) would have a projected ADT of 31,000 vehicles with an LOS of F, which would be the worst traffic congestion possible. Kanan Dume Road (from PCH to Mullholland Highway) would have an ADT of 15,000 vehicles with an LOS E. Although this represents a 35 percent increase in traffic for Malibu Canyon Road and 40 percent increase in traffic for Kanan Dume Road over 17 years, the LOS for both arterials would remain unchanged. This indicates that both roads are currently over capacity.

Parking shortages, already a problem on highly visited weekends, would not improve and could potentially worsen. Also, by not implementing an alternative transportation system, the No Action Alternative would conflict with the National Park Service mission goal supporting alternative transportation. Without capacity improvements, impacts would be moderate and potentially significant.

Preferred Alternative

a) Cause a substantial increase in traffic, in relation to existing traffic and the capacity of the street system: The Heart-of-the-Park shuttle system would have a beneficial impact on weekend vehicle trips and traffic congestion, by providing an alternate form of public transportation and reducing single-occupant automobile use. No impacts would occur.

b) Exceed, individually or cumulatively, the level of service standards established by the county congestion management agency for designated roads or highways: The Preferred Alternative would not result in worsening existing levels of service along the proposed route, as it would not significantly congest or delay traffic patterns. Although at some shuttle stops traffic would be temporarily slowed, this is not anticipated to affect levels of service. No impact would occur.

c) Cause a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks: The proposed shuttle service would not affect air traffic patterns. No impact would occur.

d) Contain a design feature or incompatible uses that would substantially increase hazards: Because some of the shuttle stops would require traffic following the shuttle buses to reduce speed as the shuttles decelerate to enter the shuttle stops, minimal impacts to safety and traffic disruptions may occur. The proposed route has been designed to make use of dedicated left turn lands, traffic signals, and other existing facilities that increase safety. As part of the project commitments, NPS will provide a highly visible, written statement on the back of their shuttle buses warning following drivers of the shuttles frequent stops. It is anticipated that the impacts at some of these shuttle stops would be negligible and less than significant with the added signage. Shuttle vehicles will leave the arterial street for shuttle stops located within internal park roadways at all of the major stops.

At the following stops, the proposed shuttle system would create new traffic patterns that could potentially create hazardous conditions, unless mitigated to levels below significance:

At the **Solstice Canyon** stop, automobile traffic traveling along Corral Canyon Road bound for PCH usually travel between an estimated 35 and 45 mph. This traffic travels downhill, and is partially blinded at a curve from the Solstice Canyon Road entrance. This may be a potentially unsafe traffic condition unless mitigated, as the shuttle has the potential to be struck by automobiles bound for PCH, if the oncoming drivers cannot see the shuttle turning left to enter the Solstice Canyon driveway. This condition is the same for all vehicles entering Solstice Canyon.

At the **Backbone Trail** (Clockwise loop only), shuttles exiting onto Kanan Dume Road, heading northbound would be facilitated by the existing center median, which would allow ample acceleration for safe merging.

At the **Backbone Trail** stop, for the Counterclockwise loop only, when exiting the stop at its southern entrance and merging onto the southbound lane of Kanan Dume Road, the shuttle could cause northbound traffic whose speeds may exceed the posted 50 mph, to slow down suddenly, with little warning. This could be a potential hazard and a potentially moderate impact under NEPA, unless mitigated, although the current condition is on an uphill grade approaching a tunnel entrance.

At the **Rocky Oaks** stop, shuttles backing into the Rocky Oaks parking lot to collect or drop off passengers, may collide with automobiles entering/exiting the parking area. This is also a potentially moderate impact under NEPA, unless mitigated.

e) Result in inadequate emergency access: The Preferred Alternative would not hinder emergency access or access to nearby uses at all shuttle stops with the exception of one.

f) Result in inadequate parking capacity: Construction of improvements at the proposed shuttle stops would result in temporary impacts to parking by restricting access to parts of each stop. These impacts, would temporary and therefore minimal and less than significant.

The shuttle system would require parking at several of the stops. At **Malibu Creek**, eight spaces would be acquired to implement the dedicated shuttle lane. There is ample parking in the rest of Malibu Creek State Park headquarters to account for a loss of eight parking spaces. Thirty Park-and-Ride spaces will be dedicated for shuttle use on the weekends only. It is anticipated that these spaces will encourage transit ridership, and result in attracting additional parking at Malibu Creek State Park. It is known that there will be adequate parking in other parts of Malibu Creek State Park, and less than significant and minimal impacts are anticipated. The State Parks Staff has stated that parking capacity at Malibu Creek State Park exceeds any peak demand to date. Filming activities and their large vehicles sometimes use large blocks of parking at the Park. However, these activities are only permitted on weekdays.

At the **Backbone Trail** stop, two parking spaces will be acquired to allow for the design of the new walkway and kiosk location. The loss of two parking spaces is considered less than significant and minimal, especially considering that visitors can park at other stops and ride to the Backbone Trail stop for recreation.

At the **Peter Strauss Ranch** stop, approximately ten unmarked parking spaces along the southern fence near the entrance would be acquired to implement the dedicated shuttle lane and landscaped island. The acquisition of these unmarked spaces is considered less than significant and minimal, considering that there is adequate parking available throughout the location. Also, existing unmarked parking (approximately 10 to 20 spaces) would be restricted on weekends to allow for the shuttle turn-around. It is anticipated that other spaces at this location would be ample for parking demand, with no significant impacts.

At the **Paramount Ranch** stop, approximately 10 to 12 unmarked parking spaces located directly across from the public restrooms would be acquired to implement the shuttle turn-around and landscaped island. The acquisition of these unmarked spaces is considered less than significant and minimal, as there are an adequate number of other existing unmarked parking spaces throughout the site.

g) Conflict with adopted policies, plans, or programs supporting alternative transportation: The Preferred Alternative would be beneficial as it would support several of the NPS's mission goals, which were implemented to encourage alternative transportation at national parks. No impact would occur.

Regarding other access: At the **Westward Beach** cul-de-sac, where the shuttle would make its turn-around, illegally parked vehicles in the red, tow-away zone might delay the shuttle, resulting in impacts to residential access for vehicles following the shuttle and impacts on access to nearby uses. This would represent a potentially moderate impact under NEPA and a potentially significant impact under CEQA. As part of the project commitments, NPS and Los Angeles County Beaches and Harbors will coordinate with a towing company to enforce towing on weekends and to keep the turn-around cleared of illegally parked vehicles. Current shuttle schedules will be provided to the towing company to encourage towing five minutes prior to shuttle stops, to help keep the turn-around clear when the shuttle is scheduled. This is anticipated to reduce potential access impacts to less than significant.

MITIGATION

For the **Backbone Trail** stop, NPS shall provide signage on Kanan Dume Road to warn southbound drivers to reduce speed in anticipation of the shuttle making an exit onto southbound traffic lanes. Furthermore, as part of the project design, the western shoulder, just south of the Backbone Trail, will be improved to allow the shuttle dedicated space to accelerate for safer merging into southbound traffic. This effort will be coordinated closely with the Los Angeles County Public Works Department. These measures are anticipated to reduce potential traffic hazard impacts to minimal and less than significant levels.

For the **Solstice Canyon** stop, NPS shall provide signage on Corral Canyon Road to warn oncoming drivers to reduce speed in anticipation of left turning vehicles (including shuttles) making an entrance onto Solstice Canyon Road. This is anticipated to reduce potential traffic hazard impacts to minimal and less than significant levels.

For the **Rocky Oaks** stop, at least two wide-angle convex mirrors will be set in place to add visibility, both for the shuttle driver while backing into the site and for automobile drivers while exiting the site toward Mullholland Highway. The shuttle will also be required to have backing lights and an alert-siren that is activated when in reverse. As part of the site design, NPS will extend existing fencing away from the driveway to allow more turning room as the shuttle enters in reverse. NPS shall provide signage warning of backing shuttle bus movements to westbound traffic on Mullholland Highway and to traffic exiting from the Rocky Oaks parking lot. These measures are anticipated to reduce potential traffic hazard impacts and pedestrian hazard impacts to minimal and less than significant levels.

CUMULATIVE IMPACTS

No Action Alternative
The No Action Alternative would result in cumulative impacts on traffic congestion in conjunction with future development in the area.

Preferred Alternative
The Preferred Alternative would not contribute to cumulative effects on transportation or circulation, and would have a beneficial impact on traffic congestion and available access to recreation resources.

CONCLUSION

No Action Alternative
The No Action Alternative would have minimal and potentially significant impacts on transportation and circulation.

Preferred Alternative
With implementation of mitigation measures, the Preferred Alternative would not negatively affect or impair transportation or circulation.

5.16 UTILITIES AND SERVICE SYSTEMS

Would the project:

a) Exceed wastewater treatment restrictions or standards of the applicable Regional Water Quality Control Board? ***No Impact***

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities? ***No Impact***

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities? ***Less Than Significant Impact***

d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed? ***No Impact***

e) Result in determination, by the wastewater treatment provider that serves or may serve the project, that it has adequate capacity to service the project's anticipated demand, in addition to the provider's existing commitments? ***No Impact***

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? ***Less Than Significant Impact***

g) Comply with federal, state, and local statutes and regulations as they relate to solid waste? ***No Impact***

AFFECTED ENVIRONMENT

Utilities, including phone, sewer, water, and power, are located at some of the stops within the study area. The extent of service is dependent on the level of development. Paramount Ranch is currently plumbed with sewer and water, and has electricity and phone lines, whereas the Backbone trailhead has none of these facilities.

METHODOLOGY/SIGNIFICANCE CRITERIA

NEPA: Potential adverse effects for NEPA are considered based on the degree by which the action would burden existing utilities or service systems or require the need for new utilities or service systems, and are described by the following intensity levels:

- Negligible – Effects that are not detectible and would have no discernible effect on utilities or service systems.
- Minimal – Effects that are slightly detectible, but would not be expected to have an overall effect on utilities or service systems.
- Moderate – Effects that are clearly detectible and could have an appreciable effect on utilities or service systems.
- Major – Effects that would have a substantial, highly noticeable influence on utilities or service systems.

CEQA: A project would have a significant effect on the environment if it would:

- Exceed wastewater treatment restrictions or standards of the applicable Regional Water Quality Control Board;

- Result in the construction of expansion of water, wastewater, or storm water drainage facilities;
- Require new or expanded water supply entitlements;
- Result in hindering a wastewater treatment provider's capacity;
- Result in causing a landfill to reach it's capacity substantially sooner than projected; or
- Fail to comply with federal, state, and local statutes pertaining to solid waste.

ENVIRONMENTAL CONSEQUENCES

No Action Alternative

The No Action Alternative would result in less than significant and negligible impacts to utilities and service systems in the study area.

Preferred Alternative

a) Exceed wastewater treatment restrictions or standards of the applicable Regional Water Quality Control Board: The Preferred Alternative would not contribute to the disposal of wastewater, as the proposed restroom at **Backbone Trail** would be of a septic-type. No impact would occur.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities: The Preferred Alternative would not require the use of any water or wastewater service. No impact would occur.

At the **Paramount Ranch** stop, an existing sewer line and manhole has been identified under the proposed area of work. As part of the project commitments, NPS will implement the improvements around the current manhole access area in close coordination with the local sewer service. Adequate setback space around the manhole will be attained through coordination. Furthermore, grading and spreading of chip seal for the turn-around will not result in damaging the manhole or any sewer pipes. Impacts would be minimal and less than significant.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities: The proposed shuttle system would not adversely affect most existing storm water drainage facilities. In several locations where decomposed granite or chip seal are added, no drainage issues are anticipated.

At the **Malibu Creek**, **Zuma Beach**, **Backbone Trail**, and **Rocky Oaks** stops, asphalt paving will be added to enhance shuttle travel. As part of the project commitments, NPS will coordinate with Caltrans District 7, County of Los Angeles Public Works, and/or the City of Malibu Public Works (as appropriate) to ensure that drainage is not significantly altered. Impacts would be minimal and less than significant.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed: The Preferred Alternative would not require the use of water supplies. No impact would occur.

e) Result in determination, by the wastewater treatment provider that serves or may serve the project, that it has adequate capacity to service the project's anticipated demand, in addition to the provider's existing commitments: The Preferred Alternative would not require wastewater services. No impact would occur.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs: The proposed shuttle system would not adversely affect solid waste disposal services, nor would it result in a need for new facilities. Although construction and operation may spur additional solid waste in comparison with existing amounts, it would not be a substantial increase. Impacts would be minimal and less than significant.

g) Comply with federal, state, and local statutes and regulations as they relate to solid waste: Because the project would not substantially increase solid waste, it is anticipated to comply with all solid waste regulations. No impact would occur.

CUMULATIVE IMPACTS

No Action Alternative
The No Action Alternative would not contribute to cumulative effects on utilities or service systems.

Preferred Alternative
The Preferred Alternative would not contribute to cumulative effects on utilities or service systems.

CONCLUSION

No Action Alternative
The No Action Alternative would not negatively affect or impair utilities or service systems.

Preferred Alternative
The Preferred Alternative would not negatively affect or impair utilities or service systems.

5.17 MANDATORY FINDINGS OF SIGNIFICANCE

a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal?
Less Than Significant with Mitigation

b) Have the potential to eliminate important examples of the major periods of California history or prehistory? ***Less Than Significant with Mitigation***

c) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means the incremental effects of a project are considerable when viewed in connection with the effects of past projects, other current projects, and probably future projects.) ***No Impact***

d) Have environmental effects that will cause substantial adverse effects on humans, either directly or indirectly? ***No Impact***

No Action Alternative

The No Action Alternative would result in continued, if not worse, traffic congestion levels in the project vicinity. This effect would be cumulative as growth in southern California increases and the demand for regional park visitation increases as a result. Cumulative traffic congestion would result in leading to the disadvantage of long-term goals including the *Draft GMP/EIS* mission goals. This long-term traffic impact also leads to long-term air quality impacts in the area.

Preferred Alternative

Quality of Environment Effects
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal: With implementation of mitigation prescribed for biological resources, impacts are anticipated to be less than significant and minimal (see 5.4 for a discussion of Biological Resources impacts and mitigation).

Short-Term Effects and Long-term Goals
b) Have the potential to eliminate important examples of the major periods of California history or prehistory: With implementation of mitigation prescribed for cultural resources, impacts are anticipated to be less than significant and minimal (see 5.5 for a discussion of Cultural Resources impacts and mitigation).

Cumulative Effects
c) Have impacts that are individually limited, but cumulatively considerable: The Preferred Alternative would not result in cumulative impacts at any levels, as there would be no individually minimal but collectively significant impacts. The proposed shuttle service and stop improvements would not interfere with other local projects or exacerbate their impacts.

Substantial Adverse Effects on Human Beings
d) Have environmental effects that will cause substantial adverse effects on humans, either directly or indirectly: With implementation of mitigation prescribed for transportation/traffic, impacts are anticipated to be less than significant and minimal (see 5.15 for a discussion of Transportation/Traffic impacts and mitigation).